

Title (en)

Video coding device and video transmission system using the same, quantization control method and average throughput calculation method used therein

Title (de)

Videokodierungsvorrichtung und ihre Anwendung in ein Videoübertragungssystem, Quantisierungskontrollverfahren und zugehöriges Verfahren zur Rechnung des durchschnittlichen Datenflusses

Title (fr)

Dispositif de codage vidéo et système de transmission vidéo utilisant celui-ci, méthode de contrôle de quantification et méthode de calcul de débit moyen utilisée dedans

Publication

EP 0757490 A3 19990113 (EN)

Application

EP 96112368 A 19960731

Priority

- JP 19773495 A 19950802
- JP 28088695 A 19951027
- JP 11676496 A 19960510

Abstract (en)

[origin: EP0757490A2] Video data coded in a coding device 12 is temporarily stored in a temporary buffer 13 before transmitted to a transmission buffer 171. A frame dropping/quantization control device 16 cancels the video data in the temporary buffer 13 if the amount of information of the video frame stored in the temporary buffer 13 is larger than a predetermined threshold, and further, sets a quantization step size with a quantization step size larger than the quantization step size used to code the video frame stored in the temporary buffer 13 and outputs it to the coding device 12. This suppresses the transmission delay time even when the amount of generated information rapidly increases due to a sudden motion of an object or when the communication conditions change, which allows display of a moving picture with smooth motion <IMAGE>

IPC 1-7

H04N 7/26

IPC 8 full level

G06T 9/00 (2006.01); **H04N 7/24** (2006.01); **H04N 7/26** (2006.01); **H04N 7/36** (2006.01); **H04N 7/46** (2006.01); **H04N 7/50** (2006.01); **H04N 7/64** (2006.01); **H04N 19/89** (2014.01)

CPC (source: EP KR US)

G06T 9/005 (2013.01 - EP US); **H04N 19/112** (2014.11 - EP US); **H04N 19/115** (2014.11 - EP US); **H04N 19/126** (2014.11 - EP US); **H04N 19/132** (2014.11 - EP US); **H04N 19/136** (2014.11 - KR); **H04N 19/137** (2014.11 - EP US); **H04N 19/147** (2014.11 - EP US); **H04N 19/154** (2014.11 - EP US); **H04N 19/166** (2014.11 - EP US); **H04N 19/172** (2014.11 - EP US); **H04N 19/176** (2014.11 - EP US); **H04N 19/196** (2014.11 - EP US); **H04N 19/503** (2014.11 - EP US); **H04N 19/587** (2014.11 - EP US); **H04N 19/61** (2014.11 - EP US); **H04N 19/89** (2014.11 - EP US); **H04N 21/6377** (2013.01 - EP US); **H04N 21/658** (2013.01 - EP US); **H04N 19/146** (2014.11 - EP US); **H04N 19/152** (2014.11 - EP US)

Citation (search report)

- [XA] EP 0647068 A2 19950405 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [X] PATENT ABSTRACTS OF JAPAN vol. 018, no. 246 (E - 1546) 11 May 1994 (1994-05-11) & US 5689307 A 19971118 - SUGAHARA TAKAYUKI [JP], et al
- [A] YOICHI KATO ET AL: "A CODING CONTROL ALGORITHM FOR MOTION PICTURE CODING ACCOMPLISHING OPTIMAL ASSIGNMENT OF CODING DISTORTION TO TIME AND SPACE DOMAINS", ELECTRONICS & COMMUNICATIONS IN JAPAN, PART I - COMMUNICATIONS, vol. 72, no. 9 PART 01, 1 September 1989 (1989-09-01), pages 63 - 73, XP000126280

Cited by

EP0984634A3; EP1146745A3; EP1001633A3; EP2120463A4; CN113891155A; US9161042B2; US6430222B1; US6931069B2; US8396130B2; WO03041413A1; WO0040031A1; US8265142B2; US6650787B1; US7031542B2; US9455739B2

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